REMARKS

Applicants' attorney is appreciative of the interview granted by Examiners Garber and Sene on May 21, 2010. At that interview, Applicants' attorney presented proposed amendments to Claims 13 and 27, and tentative agreement was reached that these agreements would overcome the rejections of record.

Claims 13-40 have been rejected under 35 USC 103(a) over Ingman et al, published in the US as US 2007/0036510.

In addition, Claims 14, 17, 31, 34 and 39 have been rejected under 35 USC 103(a) over Ingman et al in view of Kodas, Claims 16, 22, 30 and 36 have been rejected under 35 USC 103(a) over Ingman et al in view of Grolemund, Claims 23-24 and 37-38 have been rejected under 35 USC 103(a) over Ingman et al in view of Kleiner and Claims 25 and 40 have been rejected under 35 USC 103(a) over Ingman et al in view of Kleyer.

Claims 13 and 27 have been amended as discussed at the interview, and now recite that the structure on the support is electrically conducting, as is clearly set forth in the abstract of the present application, that the paste-like substance is applied to a portion of the support, which can be seen clearly in Figure 2 of the application, and that paste is applied in a linear or punctiform arrangement, as is clearly seen from Figures 1 and 2 of the application.

The invention is directed to a process for forming electrical contacts on a substrate, for example a solar cell, where the electrical contacts are in the form of a line or a point. When paste-like substances are applied to a substrate, they tend to spread. In order to reduce the width of the line or point that is applied, Applicants claim contacting the paste-like substance with a medium containing a polar molecule, resulting in hardening and stabilizing of the substance in the edge region (Claim 13) or substantially

preventing flowing of the substance along the support, and detachment of the substance from the support (Claim 27).

The Ingman et al reference was discussed in detail at the interview. Ingman et al is directed to forming protective coatings on substrates, the coatings containing nano-particle (NPM) materials. In a typical embodiment disclosed in paragraph [0098], the surface to be protected by an NPM layer is immersed in a water-air-glycerin foam and remains in the solution for between 20 and 40 seconds to be exposed to the alcohol or organic solvent-polymer solution or colloidal water-glycerin-air solution containing the nano-particles.

As disclosed at paragraph [0099], the wetted surface may then be exposed to microwave radiation causing rapid azeotropic evaporation.

Ingman et al does disclose that where the surface initially contains absorbed water, the application of the alcohol solution causes the alcohol to absorb the water and ultimately form a hydrophobic surface.

In paragraph [0102], Ingman et al discloses that a paste may be applied to the surface, stating that "a paste that contains a polymer and nano-particles is formed. Then, a surface (e.g., the surface of a substrate or fiber core) is drawn through the paste such that a film of paste sticks to the surface to be protected. Finally, the paste is cured and/or solidified to form an adequate NPM on the surface."

Applicants also recognize that the nano-particles can be thermally conductive particles and/or metal nano-particles which are used to improve the thermal conductivity.

However, Ingman et al does not disclose or suggest forming electrically conducting contacts on a substrate by applying to a portion of the substrate a flowable electrically conductive paste-like substance containing a solvent in a linear or punctiform arrangement. As far as can be

determined, Ingman et al teaches only coating the entirety of a substrate with an NPM suspension in order to form a protective coating.

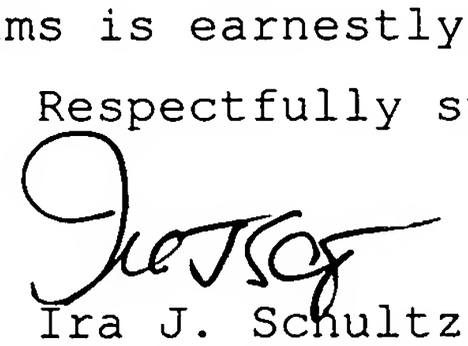
Moreover, the invention is directed to a first applying step followed by a contacting step. As far as can be determined, Ingman et al does not disclose or suggest a first step of applying an NPM suspension on a portion of a substrate, followed by a contacting step which results in hardening and stabilizing of the applied substance in an edge region. To the contrary, the NPM in Ingman et al is applied to the entire surface of the substrate so that there are no edges on the substrate to be formed. The hydrophobic properties of Ingman et al are specifically meant to provide good adhesion of the NPM on the substrate to be protected.

The remaining references to Kodas, Grolemund, Kleiner and Kleyer have been discussed in detail in previous responses, and these references do not cure the defects of the Ingman et al reference as discussed in detail above.

Withdrawal of these rejections is accordingly requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



Ira J. Schultz
Registration No. 28666
Attorney for Applicants
(703)837-9600, ext. 23

Dennison, Schultz & MacDonald
1727 King Street, Suite 105
Alexandria, VA 22314